WHAT IS CLAIMED IS:

1. An omnidirectional vision sensor comprising:

an optical system including a body-of-revolution mirror having a convex portion and having a symmetrical structure with respect to a revolution axis, wherein the body-of-revolution mirror includes a cutaway section in the convex portion of the body-of-revolution mirror so as to allow light incident from surroundings of the revolution axis of the body-of-revolution mirror to be collected; and

imaging means, including a light-receiving element for receiving the collected light and image processing means for converting an optical image generated from the collected light received by the light-receiving element into image data,

wherein the revolution axis of the body-of-revolution mirror and an optic axis of the light-receiving element coincide.

2. An omnidirectional vision sensor according to claim 1, wherein the optical system further comprises a wide-angle lens provided in the cutaway section of the body-of-revolution mirror, the wide-angle lens being disposed so

that a convex portion of the wide-angle lens faces away from the imaging means.

3. An omnidirectional vision sensor according to claim 2, wherein a field of view of the wide-angle lens coincides with a blind spot of the body-of-revolution mirror.